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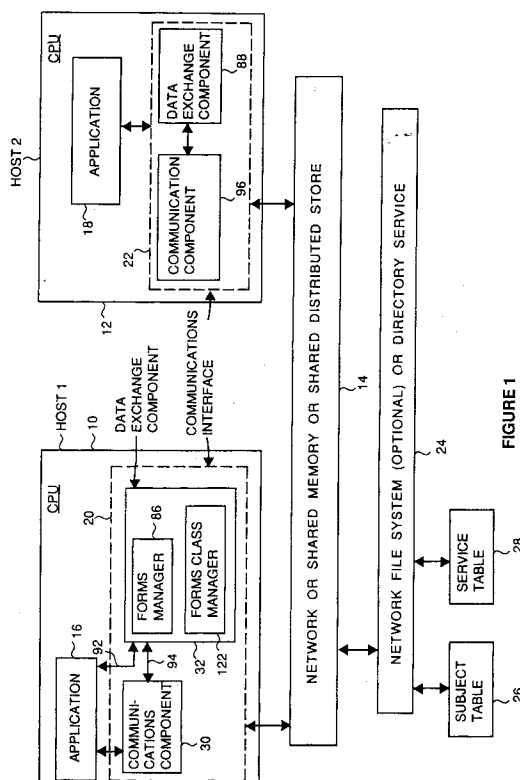
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**AT BE CH DE DK ES FR GB GR IT LI LU NL SE**(88) Date of deferred publication of the search report:  
**07.07.93 Bulletin 93/27**(71) Applicant: **TEKNEKRON SOFTWARE SYSTEMS, INC.****530 Lytton Avenue, Suite 301  
Palo Alto, California 94301(US)**(72) Inventor: **Skeen, Marion Dale**  
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**Cabinet Claude Rodhain 30, rue la Boétie**  
**F-75008 Paris (FR)**(54) **Apparatus and method for providing high performance communication between software processes.**

(57) A communication interface for decoupling one software application from another software application such communications between applications are facilitated and applications may be developed in modularized fashion. The communication interface is comprised of two libraries of programs. One library manages self-describing forms which contain actual data to be exchanged as well as type information regarding data format and class definition that contain semantic information. Another library manages communications and includes a subject mapper to receive subscription requests regarding a particular subject and map them to particular communication disciplines and to particular services supplying this information. A number of communication disciplines also cooperate with the subject mapper or directly with client applications to manage communications with various other applications using the communication protocols used by those other applications.

**FIGURE 1**



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## EUROPEAN SEARCH REPORT

Application Number

EP 90 10 1037

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
X	IBM JOURNAL OF RESEARCH AND DEVELOPMENT vol. 20, no. 5, September 1976, NEW YORK US pages 483 - 497 V. Y. LUM ET AL 'A general methodology for data conversion and restructuring' * the whole document *	1	G 06 F 9/46 G 06 F 15/16 G 06 F 15/20
A	EP-A-0 216 535 (TRW INC) 1 April 1987 * page 5, line 3 - page 8, line 9; claims 1,2,3 *	1,2,6, 10	
A	IBM TECHNICAL DISCLOSURE BULLETIN. vol. 28, no. 5, October 1985, NEW YORK US pages 2160 - 2161 'Revisable form document conversion' * the whole document *	1	
A	EP-A-0 167 725 (HITACHI LTD) 15 January 1986	1	
A	* claims 1,3 *		
A	EP-A-0 130 375 (IBM CORP) 9 January 1985 * page 2, line 8 - page 2, line 34 *	1	TECHNICAL FIELDS SEARCHED (Int. Cl.5)  G 06 F
<u>The present search report has been drawn up for all claims.</u>			
Place of search THE HAGUE		Date of completion of the search 11-01-1993	Examiner MICHEL T G
<b>CATEGORY OF CITED DOCUMENTS</b>  X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document  T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ..... & : member of the same patent family, corresponding document			



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### CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing more than ten claims.

- ☐ All claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for all claims.
- ☐ Only part of the claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claims:
- ☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

### LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirement of unity of invention and relates to several inventions or groups of inventions, namely:

See Sheet B.

- ☐ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
- ☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:
- ☒ None of the further search fees has been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims,

namely claims: 1-14



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EP 90101037 -B-

#### LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirement of unity of invention and relates to several inventions or groups of inventions, namely:

1. Claims: 1-14 : Interface for proceeding a format conversion during the exchange of data between two applications.
2. Claims: 15 : Interface for requesting data on a subject and mapping the request to the service supplying the information.